

**July 2015** 

## Wilson County

## Estimated Economic Impact of Agriculture, Food, and Food Processing Sectors

A total of 13 agriculture, food, and food processing sectors were analyzed to determine their overall contribution to the Wilson County economy.<sup>1</sup> These 13 sectors have a total direct output of approximately \$89 million and support 524.7 jobs in Wilson County. Running the model for all 13 sectors simultaneously produces the following results:

Agriculture Contribution in Wilson County

				% of Gross		% of Gross
		% of Total	Total	Regional		Regional
Impact Type <sup>2</sup>	Employment	Employment	Value Added <sup>3</sup>	Product <sup>4</sup>	Output <sup>5</sup>	Product
Direct Effect	524.7	12%	\$30,038,240	11%	\$89,408,273	34%
Indirect Effect	94.5	2%	\$6,098,763	2%	\$10,861,177	4%
Induced Effect	49.6	1%	\$3,247,184	1%	\$5,825,032	2%
Total Effect	668.8	15%	\$39,384,187	15%	\$106,094,482	40%

As shown in the above table, agriculture, food, and food processing supports 668.8 jobs, or 15% of the entire workforce in the county. These industries provide a total economic contribution of approximately \$106 million, roughly 40% of Gross Region Product (GRP). As noted below in the calculation of Gross Regional Product, imports and institutional sales are subtracted. Therefore, counties that import a relatively large amount of goods and services will have a reduced GRP which may lead to agricultural output being greater than GRP.

Another metric used to calculate the importance of sectors in an economy is their value added as a percentage of GRP. Total value added by the 13 agriculture, food, and food processing sectors is approximately \$39 million, or 15% of the GRP. This indicates that personal income, business income, and taxes generated by these sectors account for 15% of the total economy.

The following tables document the overall summary numbers of the model, top industries affected by employment and output, and a listing of all industries that were analyzed.

<sup>1</sup> Article on building a contribution analysis in IMPLAN that avoids double counting: <a href="https://implan.com/index.php?option=com\_content&view=category&id=19">https://implan.com/index.php?option=com\_content&view=category&id=19</a>

<sup>2</sup> Direct, indirect, and induced effects sum together to estimate the total economic contribution in the state. **Direct effects** capture the contribution from agricultural and food products. **Indirect effects** capture the economic benefit from farms and agricultural businesses purchasing inputs from supporting industries within the state. **Induced effects** capture the benefits created when employees of farms, agricultural businesses, and the supporting industries spend their wages on goods and services within the state.

<sup>3</sup> Value Added = Labor Income + Indirect Business Taxes + Other Property Type Income

<sup>4</sup> GRP = Final Demand of Households + Governments Expenditures + Capital + Exports - Imports - Institutional Sales

<sup>5</sup> Output = Intermediate Inputs + Value Added

In the top ten by employment, Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming is the top employer in the agriculture industry with 194.8 employees. This table also shows the amount of jobs that are created by the agriculture industry in Wilson County.

Top 10 Industries Affected by Employment

	Total	Total
Sector Description:	Employment	Output
Beef cattle ranching and farming, including feedlots and dual-purpose ranching		
and farming	194.8	\$25,298,763
Grain farming	166.0	\$29,129,384
All other crop farming	104.5	\$6,645,822
Support activities for agriculture and forestry	41.6	\$2,597,198
Oilseed farming	19.6	\$21,310,283
Landscape and horticultural services	13.4	\$722,353
Truck transportation	12.3	\$1,696,408
Veterinary services	10.9	\$642,287
Monetary authorities and depository credit intermediation	10.5	\$1,553,805
Wholesale trade	10.0	\$1,941,010

The Grain farming industry directly contributes approximately \$29 million to Wilson County's economy. This table also shows how much revenue is generated in other industries by having a strong agriculture industry.

Top 10 Industries Affected by Output

	Total	Total
Sector Description:	Employment	Output
Grain farming	166.0	\$29,129,384
Beef cattle ranching and farming, including feedlots and dual-purpose ranching		
and farming	194.8	\$25,298,763
Oilseed farming	19.6	\$21,310,283
All other crop farming	104.5	\$6,645,822
Animal, except poultry, slaughtering	8.1	\$4,885,456
Support activities for agriculture and forestry		\$2,597,198
Wholesale trade	10.0	\$1,941,010
Truck transportation	12.3	\$1,696,408
Monetary authorities and depository credit intermediation	10.5	\$1,553,805
Owner-occupied dwellings	0.0	\$1,546,329

Below is a summary of all agriculture data with employment levels and output level. These values can tell how many jobs are represented by each agriculture sector and the output they contributed to Wilson County's economy.

Sector Description:	Employment	Output
Oilseed farming	19.6	\$21,310,283
Grain farming	166.0	\$29,129,384
Vegetable and melon farming	0.3	\$25,969
Tree nut farming	0.1	\$23,799
All other crop farming	104.5	\$6,645,822
Beef cattle ranching and farming, including feedlots and dual-purpose ranching		" - 9 9
and farming	194.8	\$25,298,763
Poultry and egg production	0.8	\$188,404
Animal production, except cattle and poultry and eggs		\$131,819
Animal, except poultry, slaughtering		\$4,885,456
Bread and bakery product, except frozen, manufacturing		\$371,158
Frozen cakes and other pastries manufacturing	0.2	\$32,777
Veterinary services	10.9	\$642,287
Landscape and horticultural services	13.4	\$722,353

All 105 counties in Kansas have IMPAN models with an agriculture contribution summary. These values do not factor in the retail environment of food sales. Food retail is important, but in order to provide the most accurate picture of what production agricultural and processing contributes to Kansas, the retail sector was omitted.